

REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

Section 112 rejections

Claims 1-59 and 76-115 were rejected under 35 U.S.C. 112, first paragraph, for allegedly not providing support for a second non-gettering heat treatment.

Applicants respectfully traverse the rejections.

None of the rejected claims recites a second "non-gettering" heat treatment. There is no language in the claims that suggest that gettering does not occur during the second heat treatment. Applicants submit that gettering would occur during this second heat treatment, which is supported by Embodiment 1, e.g., Fig. 2E. Accordingly, Applicants submit that the rejections should be withdrawn.

Double patenting rejections

Claims 1-59 and 76-115 were rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 1-31 of U.S. Patent No. 5,700,333 to Yamazaki et al. ("the '333 patent").

The Action states in the Response to Applicants' Arguments section that since claim 1 of the '333 patent recites a layer and a region, then the region cannot be considered an entire layer. Applicants disagree with this reading. Claim 1 recites "forming a gettering layer on or a gettering region within said semiconductor layer after said crystallizing, said gettering layer containing phosphorus." The claim allows for a distinct gettering layer on or a gettering region within the semiconductor layer. The only regions described in the patent

are "depth-wise" regions (see col. 6, lines 44-46), which could cover the entire area of the semiconductor layer, and Applicants submit that this is the intent of the teaching of the '333 patent. Applicants submit herewith a drawing illustrating the difference between the method of the '333 patent and the present invention.

There is no disclosure of an island-like gettering region on the silicon layer in the '333 patent. Accordingly, Applicants submit that claims 1-59 and 76-115 are patentably distinct from claims 1-31 of the '333 patent.

The Action refers to US 6,251,712 and US 5,961,743 as teaching that the metal will move horizontally towards a small gettering area. Since these patents were not used in the Double patenting or Section 103 rejections, Applicants will not address them here. However, Applicants request that the specific portions of the patents describing these teachings be identified.

Section 103 rejections

Claims 1-16, 76-77, 82-108 and 112-115 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over the '333 patent.

Claims 17-59, 75, 78-81 and 109-111 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over the '333 patent in view of Zhang et al (US 5,569,936).

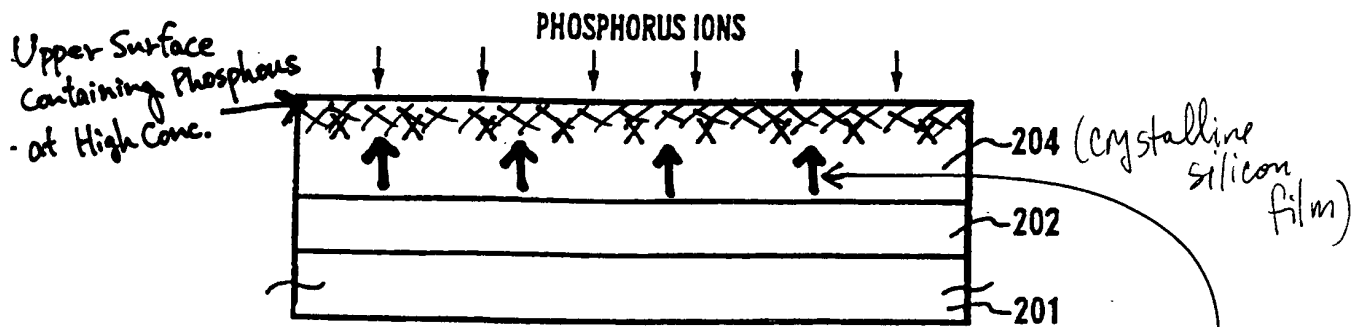
Applicants submit that claims 1-16, 76-77, 82-108 and 112-115 are allowable over the '333 patent for the reasons stated above in the Double patenting rejections section.

Zhang et al is merely cited for its disclosure of using lasers to crystallize amorphous silicon. Accordingly, Applicants submit that claims 17-59, 75, 78-81 and 109-111 are

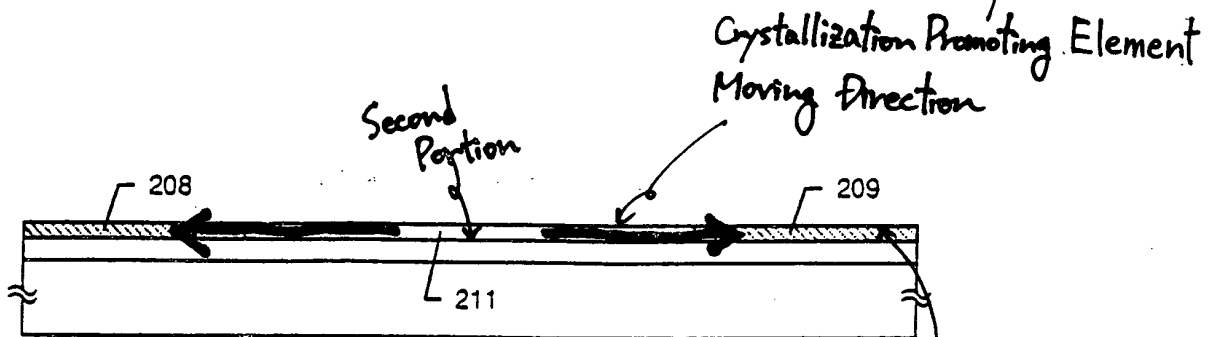
also allowable over the '333 patent and Zhang et al. for the reasons stated above in the Double patenting rejections section.

Information Disclosure Statement

It is respectfully requested that the previously filed Information Disclosure Statement of September 24, 2002 be accepted and considered under Rule 97(c)(2). Applicants enclose a copy of a check in the amount of \$180 which was submitted for payment of the Information Disclosure Statement. In addition, a copy of the return stamped postcard is also enclosed indicating that the check was, in fact, received by the Patent Office.



(Fig. 2B of USP 5,700,333)



(Fig. 2E of Present Invention)

First Portion